

10/729,430

- 2 -

Amendments to the Claims

Please amend Claims 13, 26 and 28. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Cancelled)
2. (Previously Amended) A power converter as claimed in claim 13 wherein the controlled rectifier is caused to be off during a portion of each cycle when the duty cycle is reduced.
3. (Cancelled)
4. (Previously Amended) A power converter as claimed in claim 13 wherein the duty cycle is reduced to limit current.
5. (Cancelled)
6. (Cancelled)
7. (Previously Amended) A power converter as claimed in claim 13 wherein the secondary winding circuit comprises plural secondary transformer windings.
8. (Previously Amended) A power converter as claimed in claim 13 wherein the primary winding circuit includes a single primary winding and the secondary winding circuit includes two secondary windings coupled to the single primary winding.
9. (Original) A power converter as claimed in claim 8 wherein the primary winding is in a full bridge circuit.
10. (Original) A power converter as claimed in claim 9, further comprising a capacitor in series with the primary winding.
11. (Canceled)

10/729,430

- 3 -

12. (Previously Amended) A power converter as claimed in claim 13 wherein the converter provides no regulation during normal operation.
13. (Currently Amended) A power converter comprising:
 - a primary winding circuit;
 - a secondary winding circuit coupled to the primary winding circuit, a secondary winding circuit comprising a secondary transformer winding in series with a controlled rectifier having a parallel uncontrolled rectifier; and
 - a control circuit which controls duty cycle of the primary winding circuit, the duty cycle causing near continuous flow of power through the primary and secondary winding circuits during normal operation but being reduced to cause freewheeling periods in other than normal operation, the duty cycle being reduced as a function of sensed current, the control circuit comparing the duty cycle to a threshold and shutting down operation when the duty cycle drops below the threshold.
14. (Cancelled)
15. (Previously Amended) A method as claimed in claim 26 wherein the controlled rectifiers are caused to be off during a portion of each cycle when the duty cycle is reduced.
16. (Cancelled)
17. (Previously Amended) A method as claimed in claim 26 wherein the duty cycle is reduced to limit current.
18. (Cancelled)
19. (Cancelled)
20. (Previously Amended) A method as claimed in claim 26 wherein the power is applied to plural secondary windings.

10/729,430

- 4 -

21. (Previously Amended) A method as claimed in claim 26 wherein power is applied through a single primary winding and two secondary windings coupled to the single primary winding.
22. (Original) A method as claimed in claim 21 wherein the primary winding is in a full-bridge circuit.
23. (Original) A method as claimed in claim 22 wherein a capacitor is in series with the primary winding.
24. (Cancelled)
25. (Previously Amended) A method as claimed in claim 26 wherein the converter provides no regulation during normal operation.
26. (Currently Amended) A method of converting power comprising:
 - providing power to primary and secondary transformer windings, there being a controlled rectifier having a parallel uncontrolled rectifier in series with the secondary transformer winding;
 - controlling duty cycle of the power to the primary winding, the duty cycle causing near continuous flow of power through the primary and secondary winding circuits during normal operation but being reduced to cause freewheeling periods in other than normal operation, the duty cycle being reduced as a function of sensed current; and
 - comparing the duty cycle to a threshold and shutting down operation when the duty cycle drops below the threshold.
27. (Cancelled)
28. (Currently Amended) A power converter comprising:
 - primary and secondary transformer windings, there being a controlled rectifier having a parallel uncontrolled rectifier in series with the secondary transformer winding;
 - means for controlling duty cycle of the power to the primary winding, the duty cycle causing near continuous flow of power through the primary and secondary winding

10/729,430

- 5 -

circuits during normal operation but being reduced to cause freewheeling periods in other than normal operation, the duty cycle being reduced as a function of sensed current; and means for comparing the duty cycle to a threshold and shutting down operation when the duty cycle drops below the threshold.